

REMARKS

This is a full and timely response to the final Office Action mailed September 11, 2006. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

Present Status of Patent Application

Upon entry of the amendments in this response, claims 1, 3-4, 6-10, 14, 16, and 18-20 remain currently pending in the present application. Specifically, claims 4, 7-10, and 19-20 are original, unamended claims; claims 2, 5, 11-13, 15, and 17 remain canceled; claims 1 and 14 have been previously presented; and claims 3, 6, 16 and 18 have been currently amended with no addition of new matter. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

A. Claim Rejection under 35 U.S.C. § 103(a)

I. Statement of the Rejection

Claims 1, 3-4, 6, 9-10, 14, 16, and 18-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Soules et al. (US 6,252,254) in view of Ellens et al. (US 6,674,233).

Response to the Rejection

The MPEP provides several guidelines for rejecting a claim under 35 U.S.C. 103(a). Specific reference is made to MPEP 706.2(j) *Contents of a 35 U.S.C. 103 Rejection*, which states in pertinent part:

To establish a *prima facie* case of obviousness, **three basic criteria must be met**. First, there must be **some suggestion or motivation**, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a **reasonable expectation of success**. Finally, the prior art reference (or references when combined) **must teach or suggest all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.
(Emphasis added)

Applicants respectfully assert that the current rejection of claims 1, 3-4, 6, 9-10, 14, 16, and 18-20 is improper because the Office action fails to satisfy the requirements of MPEP 706.2(j) for establishing a *prima facie* case of obviousness. Remarks related to specific claims are provided below.

Claim 1

In rejecting claim 1, the Office action asserts that Soules et al. disclose various aspects of Applicants' claim 1, except for the fact that the mold material 16 is epoxy. However, the Office action goes on to assert that Ellens et al. disclose epoxy encapsulation material 5, which provides excellent thermal stability.

The first criterion under MPEP 706.2(j) states that there must be some suggestion or motivation to combine reference teachings. In the present rejection, two references have been cited as combinedly anticipating each element of Applicants' claim 1. Unfortunately, no proper motivation has been disclosed that would lead one of ordinary skill in the art to combine these two references. Applicants respectfully assert that it is improper on the part of the Office action to merely point to certain selected aspects of Soules and Ellens and state that it would be logical to combine these two references because of a perceived advantage in doing so.

Applicants' assertion may be further substantiated by using an example wherein a prior art reference may contain a disclosure relating to application of gold plating on pins of a light generating device. Even though the gold plating provides several advantages, it is not automatic that one of ordinary skill in the art would be motivated to modify Soules' light emitting device to include gold plating, unless Soules disclosed a reason to do so.

Similarly, it is illogical to presume that one of ordinary skill in the art would modify Soule's device to include epoxy, when there is no disclosure in Soules to suggest any thermal-related shortcoming.

It may be also relevant to point out that it is legally impermissible to utilize hindsight obtained via Applicants' own disclosure to assert that a combination of prior art references would be apparent to one of ordinary skill in the art.

For at least the reasons outlined above, Applicants respectfully assert that the rejection fails to satisfy the first criterion of MPEP 706.2(j) to establish a *prima facie* case of obviousness as required for a proper rejection under 35 U.S.C. §103(a). The rejection further fails to satisfy the third criterion for reasons described below.

The Office action alleges that Soules discloses: "a mold material 16 placed over the light-emitting device 12, the molding material including..." (Emphasis added). However, Applicants' claim 1 does not pertain to "a mold material." Apparently, Applicants' claim 1 element referred to herein is: "an epoxy placed over the light emitting device." In this matter, Applicants' claim 4 includes "a mold covering the epoxy" and "an optical dome covering the epoxy." Kind attention is

drawn to Applicants' original specification, FIG. 2 in particular, which shows two distinct elements – an epoxy (31, 32, 33) and a mold (34) covering the epoxy.

The Office action goes on to allege that “the mold material 16 is epoxy” which is disclosed in Ellens. Applicants respectfully submit that the Office action rejection is ambiguous and fails to clearly show prior art elements that allegedly anticipate the epoxy of Applicants' claim 1.

Regardless of this oversight, Applicants wish to point out that the Office action alleges that Soules col. 3, lines 57-60 anticipates that part of Applicants' claim 1 which includes: “a blue light emitting device that emits blue light with peak wavelength within a range from 460 nanometers (nm) to 480 nm.” Applicants have reproduced below, Soules col. 3, lines 57-60, which states:

Blue-emitting **LED** 12 has an emission peak at **420-470**, more typically 430-460, more typically 440-450, optionally about 450-470 nm, typically with a full width at half maximum of not more than 70, more typically 50, more typically 30 nm.
(Emphasis added)

Soules' emission peak emanating from a blue light emitting **diode (LED)**, ranges from 420-470 nm, which is in contrast to Applicants' light emitting **device (not limited to an LED)** with a range from 460 nm to **480 nm**. Consequently, Applicants respectfully assert that Soules LED does not anticipate Applicants light emitting device, as alleged in the Office action, and therefore, the rejection fails to satisfy the third criterion of MPEP 706.2(j) (vis-à-vis the prior art references when combined must teach or suggest all the claim limitations).

In summary, for at least the reasons cited above, Applicants respectfully assert that the current rejection of claim 1 is improper because the Office action fails to establish a *prima facie* case of obviousness that satisfies MPEP 706.2(j) for a proper rejection under 35 U.S.C. §103(a). Therefore, Applicants hereby request withdrawal of the rejection, followed by allowance of claim 1.

Claim 3

Because independent claim 1 is allowable, claim 3 that depends directly on claim 1 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Nonetheless, in the interests of moving forward prosecution in this case, Applicants have further opted to currently amend claim 3 to omit YAG:Ce, and respectfully submit that claim 3 is now allowable not only because of its dependence on allowable claim 1, but also because the combination of prior art references fails to disclose a yellow phosphor having one of the chemical formulas listed in the claim. Allowance of claim 3 is respectfully requested.

Claim 4

Because independent claim 1 is allowable, claim 4 that depends directly on claim 1 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Consequently, Applicants respectfully request allowance of claim 4.

Claim 6

Because independent claim 1 is allowable, claim 6 that depends directly on claim 1 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Nonetheless, in the interests of moving forward prosecution in this case, Applicants have further opted to currently amend claim 6 to omit SrS:Eu² and YAG:Ce, and respectfully submit that claim 6 is now allowable not only because of its dependence on allowable claim 1, but also because the combination of prior art references fails to disclose red and yellow phosphors having one of the chemical formulas listed in the claim. Allowance of claim 3 is respectfully requested.

Claims 9 and 10

Because independent claim 1 is allowable, claims 9 and 10 that each depend directly on claim 1 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Furthermore, it may be relevant to point out that there is no valid motivation or suggestion that is disclosed in the Office action to justify modifying Soules' LED to include a PCB and/or a PCB substrate. Applicants respectfully request allowance of claims 9 and 10.

Claim 14

In rejecting claim 14, the Office action states: "With regard to claim 14, in addition to the limitations disclosed in claim 1 above, Soules et al. modified by Ellens et al. also disclose: a holding means 8 for holding..." Applicants respectfully traverse this Office action statement because it improperly links claim elements of independent claim 14 to claim elements of independent claim 1. It will be understood that the scope of coverage provided by these two independent claims is different. However, in the interests of brevity, Applicants have opted to refrain from repeating the remarks related to MPEP 706.2(j) that have been presented above with reference to the rejection of independent claim 1. These remarks are equally pertinent to the rejection of independent claim 14 and describe why claim 14 is allowable. Applicants hereby respectfully request allowance of claim 14.

Claim 16

Because independent claim 14 is allowable, claim 16 that depends directly on claim 14 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Nonetheless, in the interests of moving forward prosecution in this case, Applicants have further opted to currently

amend claim 16 to omit YAG:Ce, and respectfully submit that claim 16 is now allowable not only because of its dependence on allowable claim 14, but also because the combination of prior art references fails to disclose a yellow phosphor having one of the chemical formulas listed in the claim. Allowance of claim 16 is respectfully requested.

Claim 18

Because independent claim 14 is allowable, claim 18 that depends indirectly on claim 14 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Nonetheless, in the interests of moving forward prosecution in this case, Applicants have further opted to currently amend claim 18 to omit SrS:Eu² and YAG:Ce, and respectfully submit that claim 18 is now allowable not only because of its dependence on allowable claim 14, but also because the combination of prior art references fails to disclose red and yellow phosphors having one of the chemical formulas listed in the claim. Allowance of claim 18 is respectfully requested.

Claims 19 and 20

Because independent claim 1 is allowable, claims 19 and 20 that each depend directly on claim 14 is also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Furthermore, it may be relevant to point out that there is no valid motivation or suggestion that is disclosed in the Office action to justify modifying Soules' LED to include a PCB and/or a PCB substrate. Applicants respectfully request allowance of claims 19 and 20.

II. Statement of the Rejection

Claims 7-8 are rejected under 35 U.S.C. §103(a) as being unpatentable over Soules et al. (US 6,252,254) in view of Ellens et al. (US 6,674,233) as applied to claim 1 above, and further in view of Marshall et al. (US 6,513,949).

Response to the Rejection

Claims 7-8

Because independent claim 1 is allowable, claims 7 and 8 that each depend directly on claim 1 are also allowable as a matter of law. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Furthermore, it may be relevant to point out that the Office action fails to disclose a valid motivation or suggestion to combine the cited prior art references. In terms of providing a motivation, the Office action improperly suggests that "it would have been obvious to include second LED with epoxy phosphors mixture in order to have an improved performance hybrid lighting system."

There is nothing in Soules to suggest addition of a second light emitting device and/or a

third light emitting device, let alone such an addition to create a “hybrid lighting system.”

Applicants respectfully assert that it is improper to fabricate a motivation using hindsight merely for the purposes for carrying out a rejection.

In this matter, it may be pertinent to point out to Federal Circuit findings that have ruled: Hindsight reconstruction is impermissible. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 19 USPQ2d 1111 (Fed. Cir. 1991). Furthermore, “the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” *In re Fitch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).” For at least this reason, Applicants respectfully assert that the current rejection of claims 7 and 8 is improper because the Office action fails to establish a *prima facie* case of obviousness that satisfies MPEP 706.2(j) for a proper rejection under 35 U.S.C. §103(a).

Applicants hereby request withdrawal of the rejection, followed by allowance of claims 7 and 8.


Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

In light of the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that all pending claims 1, 3-4, 6-10, 14, 16, and 18-20 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned representative at (404) 610-5689.

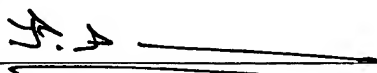
Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA, 22313-1450, on 17 October 2006.



Signature
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